STRANGE EDEN AMID ICE WASTES OF GREENLAND

Capt. Koch and Two Companions Who Spent the Winter in Queen Luise Land Expected Back This Month

An Ice Cavern in One of the Great Glaciers.

A Bit of the Terrain in the Trail of the Glacial Area.

Captain Koch at the Entrance of a Glacial Cavern.

GREENLAND has attracted the Arctic explorer frequently within the last two decades, and yet there is still much to learn about that region of the earth. Knud Rasmussen, who recently returned from North Greenland, is the latest to bring news of that icebound part of the globe. He is not ready to take the world into his confidence, having some lectures to prepare and a book to write before his story is given to the public. However, there is an item about his expedition which seems worth telling now.

One Peter Freuchen, map maker of the party, stumbled upon a cache made by Peary twenty-one years ago. The Arctic winds by chance had blown the loose snow away, thus exposing the traces of Peary's work. Freuchen says:

"We found five big skeletons of musk oxen on the skulls of which was still preserved the creatures' hair. But the strangest part of our discovery in the cache itself was an empty bottle containing three clippings from THE NEW YORK SUN of July 21, 1892, and the papers were only slightly discolored after all those years. The bottle in which the clippings reposed bore on its cork the printed words, 'Barton-Guestier, Bordeaux.' The aroma from the cork had filled the bottle and was so delicious that I swore to trace the brand to its source should I live to return to civilization."

There is greater interest in another Danish expedition, under Capt. J. P. Koch, which spent last winter in Greenland primarily to study the ice cap of that northern continent. As a matter of fact the glacial cloak which covers that distant region is gradually slipping away into the sea, and it may be within the realm of science to foretell when that part of the world shall again be verdant throughout the better part of its area.

The lure of the northland is difficult to resist, and after more than one experience with hardships in that frigid region Capt. Koch returned there with a small party a year ago to complete the exploration of a puzzling climatic anomaly upon which he had stumbled previously. This was in Queen Luise Land, which rears its broad shoulders from amid Greenland's ice cap and smiles radiantly in the flora of springtime more than a month in advance of the seacoast of the same latitude.

In 1906-08 Capt. Koch travelled over part of Greenland under the leadership of Mylius Erichsen, but, unlike his unfortunate chief, he managed to get back to civilization. It was while making his desperate struggle toward the coast that Capt. Koch and his well nigh exhausted companions happened by mere chance upon Queen Luise Land. It was such a contradiction to the surrounding physical conditions that they longed to examine it at some length, but they were too worn out to do more than make a casual inspection of a part of its easternmost border as they struggled back to one of the coastal villages.

So remarkable were the geological and the biological conditions of that strange land that Capt. Koch made up his mind to return there for the purpose of making a complete survey when circumstances permitted. His present undertaking is an effort toward realizing this desire, and in a few weeks now we shall probably know how well he has succeeded.

Capt. Koch's present party is a small one. Besides himself it consists of Dr. A. Wegener, meteorologist, of the University of Marburg, Germany, and Dr. A. A. Lundager, botanist. In the beginning his force included an Icelander named Sigurdson, whose principal function was to recruit a part of the transport equipment, and in this work there was a novel feature.

In the past Eskimo dogs have been the chief reliance of Arctic travellers for the hauling, but Capt. Koch has broken away from tradition and is now depending upon Iceland ponies for this work.

At the outset he had fifteen of these animals, and theirs was the task of drawing inland from Denmark Harbor to the eastern edge of Queen Luise Land, a distance of 150 miles from the coast, the entire camp outfit, weighing about twenty tons. A goodly part of this burden included food for the ponies. Most of these ponies Capt. Koch abandoned in May when he and his two companions—if all three have survived the winter—set out from Queen Luise Land to cross the inland ice on their journey to the west shore of Greenland.

Six years of work previously in Greenland taught Capt. Koch that hunger is not the only thing to be guarded against: one of the gravest menaces is that of frostbite, and the feet of the Arctic traveller heretofore have suffered most. In the present expedition the explorers have been provided with wooden shoes so big that there was room besides for a filling of straw. It is hoped that these proved effective protections not only against the cold but likewise against the rough usage to which the footgear has been subjected in trudging over broken ground and traversing the inland ice.

Until very recently, that is until Capt. Koch returned to Denmark four years ago, it was commonly believed that Greenland's ice cap completely covered the whole of the interior territory. But Capt. Koch then told the world of Queen Luise Land and of the wonders of that comparative Eden in the far away north, which seemed to defy the grim barrier of surrounding ice, which under normal circumstances would have doomed that region to certain barrenness.

Strangely to the contrary, Queen Luise Land blazed with the color of myriads of beautiful Arctic flowers that turned the rugged land into a veritable garden, and the heather and the poppy lent their share to the floral richness. The hare and the fox were abundant, breaking from cover in large numbers, and the musk ox was found from time to time. But there was still another reason for wonderment: Summer reached this icebound land a whole month sooner that it did the adjacent coast.

The whole condition was an apparent climatic paradox. The region was a mirage turned into substance in a very desert of ice. Capt. Koch but a short while before leaving on his present expedition expressed himself as follows regarding his own amazement: "We stood face to face with a geological puzzle, the mysterious glacial age. We had before us an exact duplicate of the Scandinavian mountains as they probably looked in those far distant days when their highest peaks began to rise clear of the ice which had so long buried them."

Why is Queen Luise Land alive with animal and vegetable life, when all around it for leagues upon leagues there is nothing but a frigid waste? Is the area of this strange territory widening year by year? Is it possible then for the scientist to estimate the coming of the day when the whole of Greenland will be like this strange oasis?

These are some of the questions which Capt. Koch and his fellow scientists were anxious to answer, and probably they may give us a partial if not an entire solution of the enigma when they return to civilization this summer.

Queen Luise Land at its highest point so far ascertained is more than 6,000 feet above sea level, and 3,000 feet of this rises superior to the enveloping glacial barrier. Just how thick the ice cap really is of course is a matter of pure speculation, but it no doubt ranges anywhere from 500 to 3,000 feet in depth and may be of even greater profundity. This is the frigid cloak which Greenland has carried for ages, and this indubitable fact makes more astounding the vegetable and animal life which abounds upon that rugged, uncovered surface.

According to the programme, Capt. Koch and his party were to hold to their camp on the eastern border of Queen Luise Land until last February. During March and April they were to make a succession of expeditions over that territory in their endeavor to obtain a fuller knowledge of its 3,000 square miles of area. Two months is but a short period for this work, but that was about as long as the expedition expected to spend in this part of the task. With the coming of May the winter camp was to be abandoned, and so too eleven of the ponies. Only four of these sure footed animals and a like number of loaded sleds were thereafter to constitute the transport.

If all goes well with Capt. Koch and his companions they should reach Upernavik some time this month or at the latest before the end of August.

Railroads Too Slow for the Mails—New Era in Sight—

Inventors at Work on Projects Which Will Carry Letters at Speeds of from 70 to 300 Miles an Hour—More Mail Tubes Planned for This City

ARE we on the eve of a revolution in the system of transporting postal matter over long distances? Are the railway trains to have a formidable rival in this service? Many signs point in this direction. E. M. Morgan, New York's postmaster, is quite convinced that a new era is near. He frankly admits that carriage by trunk line railways is not meeting the pressing demands of to-day.

At the present time the mail cars are almost invariably integral parts of passenger trains. Their speed is restricted. Therefore the chances of materially expediting the mails upon the trunk lines are not particularly promising. What then can be done to meet the growing needs of business?

Every new agency that has bettered the means of written or vocal communication has increased greatly the volume of business and the number of letters. The coming of the telegraph was followed by a responsive increment in first class postal matter. In commercial practice a letter generally confirms a telegraphic order for the sake of the legal value of the record and because of the greater details which are incorporated in the communication which goes by post.

The telephone did all that the electric telegraph did but exercised its influence primarily within the cities and towns immediately concerned at first. Then as the use of the service grew and long distance telephony developed there was an extraordinary expansion of business industry within every twenty-four hours. Something had to be done to make the speedy preparation of letters possible, and the typewriter came into being. It would be difficult to estimate accurately just how much the telephone and the typewriter have done toward swelling the vast postal activity of to-day, but that they have outranked all other influences in this direction cannot be gainsaid.

What is capable of being traced is the bulk of the first class mail, which has grown since these two instruments of latter day intercourse have come into widespread use, and the figures are astonishing. In a period of three years the railways supplied the post office with an increase in mileage of nearly 12 per cent., this independently of the volume of the postal matter carried, and the figures have been mounting steadily since these were taken for comparison in 1910. In 1907 the railways furnished the post office 387,557,165 miles of transportation and in 1910 the total reached a mileage of 426,923,109.

This is a pretty fair indication of the part the trunk lines play in getting letters to their destinations and incidentally emphasizes the need of more rapid means of transportation for letters and registered parcels going beyond the limits of the city. Compared with the telephone service and the letter producing typewriter, the "limited" trains as an agency of intercourse trail over the landscape, relatively speaking, as if weighted with leaden heels.

Before it is possible to appreciate what is coming in the future to make postal intercourse quicker between business centres of the country it is necessary to consider the germ of revolution as it is developing within the urban limits of big cities. Perhaps you know that there is a mail tube service here in Manhattan which has been doing effective but restricted duty for some years. This is an installation extending from the main office downtown to Harlem.

This tube is only eight inches in diameter, and mail despatched to the uppermost limits of the route must be relayed a number of times before reaching its destination. The eight inch tube is too small to take a pouch of the regulation size and the letters must be packed in the container and taken out and again packed for forwarding in passing on from station to station. The impulse is compressed air, and the tube is utilized only to supplant the more leisurely transfer by wagons, &c. The horse drawn vehicle is the prevailing mode of getting the mail moved from point to point. Fortunately motor vehicles will soon supplant these horse drawn affairs and to that extent there will be a marked improvement. But this change is not the one needed most.

Some months ago Postmaster Morgan and a commission appointed by the Federal postal authorities took up the question of bringing the postal facilities here up to date, and they proposed the installation of a double mail tube service which should connect the branch post offices at the two great railway terminals, the Grand Central and the Pennsylvania stations, together with a supplemental line reaching down to the main Post Office here in the heart of the business section. The proposed tubes are to be twenty-four inches in diameter and capable of handling the regulation mail bags. This would do away with the present loss of time in repouching and would immensely increase the hourly mail transporting capacity.

To-day between the Grand Central and Pennsylvania stations the wagons run nearly the full twenty-four hours in order to carry the 4,000 or more pouches of mail involved. It is estimated that these bags have an average weight of 100 pounds and this means that 200 tons of postal matter must thus be handled and disposed of over this route every day. This of course does not represent the total of the city's service by any means and does not include the transportation of mail from downtown to and from these railway centres of shipment.

The new line would do this work speedily, would not be liable to interference by reason of blocked streets or weather conditions, and the bags would be despatched from point to point at a rate ranging anywhere from twenty-five to seventy-five miles an hour, as occasion might require. The problem before the local authorities is to decide which system of a number submitted is the one best fitted to meet Manhattan's needs.

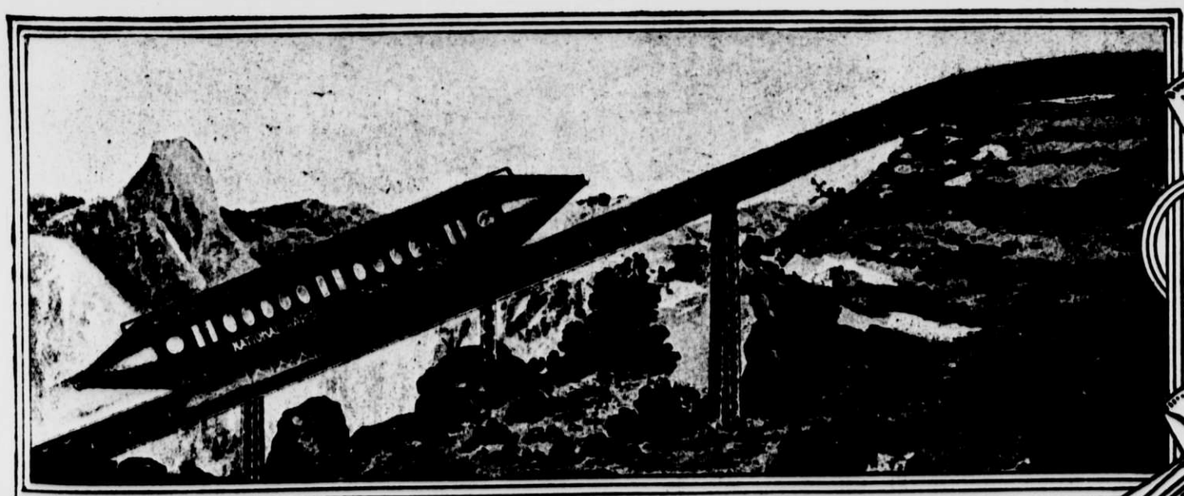
Bids have been submitted already and the schemes are either pneumatic or electrical in their method of propulsion. All of them have been tested either practically or experimentally, and apart from their individual merits each aims to do away with existing surface wagons and to increase the velocity and the volume of the postal matter to be carried from point to point within the limits specified. In this movement toward better service New York is following in the wake of kindred efforts abroad.

The underground conduit or tube, which is pretty costly to install, is not the type generally recommended for intercity or interstate service. The majority of the installations are virtually elevated viaducts of one sort or another which can be laid over the country without any particular regard to territorial contours, most of the systems being good hill climbers and intended to follow the shortest route between points, in this feature showing a radical difference from the procedure in laying out the regulation trunk lines.

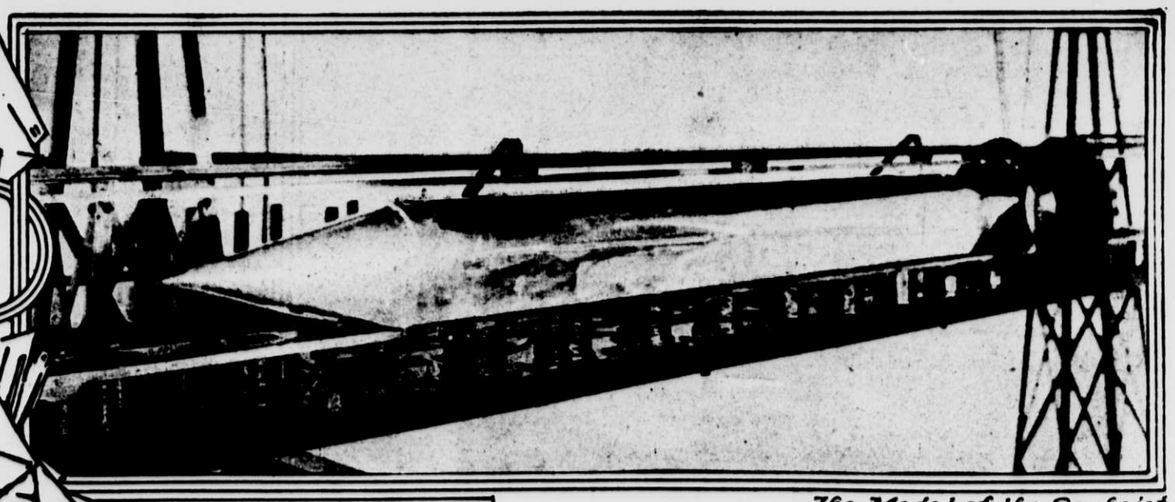
As might naturally be expected, the monorail system has been strongly urged by some of the people very much concerned in promoting rapid transit both for mail and for passenger service, and one of the most interesting of these contemplates doing the double duty of carrying people and postal matter at a rate of 200 miles an hour. The engineers have figured that this could be done at a fuel cost not exceeding three cents a mile. Whether this ambitious project will see its accomplishment within our time is of course debatable, but the elements of risk are less than most people would imagine, thanks to the stabilizing powers of the gyroscope, improvements in electrical propulsion and the metallurgical advances which make it possible to obtain lighter and stronger materials than could be had a few years ago.

About a year ago the engineering world was decidedly interested in the demonstrating performances of a small levitated railway, the climax of years of study on the part of its inventor, Emile Bachelet. Certainly that small installation did some remarkable things, and the question is, can a full sized plant be made to run as effectively and within the limits of commercial economy?

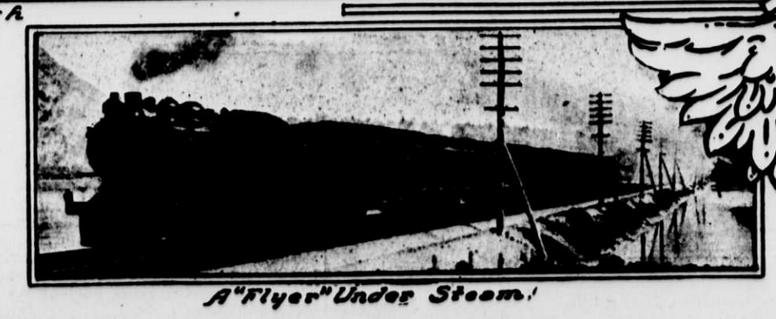
Mr. Bachelet made a novel use of the repulsive force of certain magnetic stream lines, and his carrier or car was actually made to float in the air, thus avoiding rail friction and other associate hindrances. His purpose was to provide a means of transporting mail and some kinds of valuable express matter aggregating in unit weight, with the car, a total of about 500 pounds; and from New York to Boston he prophesied a speed in transit of quite 300 miles an hour.



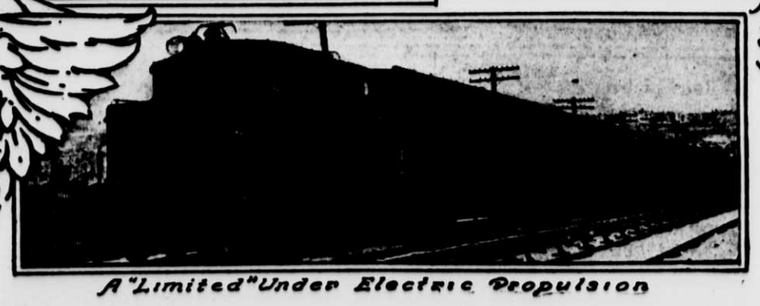
A Monorail Line Which is Promised to do 200 Miles an Hour



The Model of the Bachelet Mail and Express Carrier Speed Promised From 300 to 500 Miles an Hour



A "Flyer" Under Steam.



A "Limited" Under Electric Propulsion